

What is Claimed is:

1. A foam chemical dispenser device, comprising:
a dispenser housing, said dispenser housing having a body portion defining a mixing
module reception area;
5 a mixing module positioner adjustably supported by said dispenser housing between a
mixing module hold position and a mixing module access position;
a finger releasable locking device which, when in a locking mode, locks said mixing
module positioner in the hold position and when in a release mode provides for positioner
adjustment to said access position.
- 10 2. The device of claim 1 wherein said finger releasable locking device is a toggle
clamp.
3. The device of claim 2 wherein said toggle clamp comprises an over-the-center
latch.
4. The device of claim 3 wherein said latch has an adjustable contact member.
- 15 5. The device of claim 4 wherein said adjustable contact member includes a threaded
rod with elastomeric tip.
6. The device of claim 1 wherein said mixing module positioner includes a pivotable
member.
7. The device of claim 6 wherein said pivotable member includes a cover plate
20 which has a pivotable first end pivotably attached to said body portion and has a contact section
spaced from the pivotable first end, said locking device extends into contact with said contact
section when in the locking mode.

8. The device of claim 7 wherein said cover plate has an outer edge which forms a peripheral closure seal relative to said body portion, but for an open end region which receives the outlet end of the mixing module.

5 9. The device of claim 1 wherein said locking device is adjustable into different compression levels relative to a mixing module received within said reception area.

10. The device of claim 1 wherein said locking device includes an extension member that is positioned for contact with said positioner and is adjustable in position to vary force levels placed on said positioner.

11. The device of claim 10 wherein said extension member has an elastomeric tip.

10 12. The device of claim 10 wherein said extension member comprises a threaded section.

13. The device as recited in claim 1 further comprising retention means designed for engagement with a mixing module received in the reception area of said body portion.

15 14. The device as recited in claim 13 wherein said retention means includes a male/female interconnection element.

15. The device as recited in claim 14 wherein said male/female interconnection element includes a projection extending within said reception area that is dimensioned for extension into a recess formed in the mixing module.

20 16. The device as recited in claim 1 wherein said body portion includes at least one chemical passageway with outlet positioned for chemical communication with a mixing module chemical port when the mixing module is received within said reception area.

17. The device as recited in claim 16 further comprising a solvent passageway with outlet positioned for solvent communication with a solvent port in the mixing module when the mixing module is received within said reception area.

18. The device as recited in claim 1 further comprising a mixing module received within said reception area, said mixing module having one or more chemical ports having seal reception regions extending about said one or more chemical ports, and seals positioned within said seal reception regions which are configured to hold said seal in position relative to said mixing module, and said seals being placed in compressive contact with said main body when said positioner is in said hold position.

19. The device in claim 1 wherein said locking device is configured for one finger releasing and locking.

20. A foam chemical dispenser, comprising:
a dispenser body with a mixing module placement portion;
a pivotable door pivotably supported by said dispenser body and movable between a mixing module hold position and a mixing module access position; and
means for releasably locking said door in the hold position.

21. The dispenser of claim 20 wherein said means for releasably locking includes a toggle clamp.

22. The dispenser of claim 20 wherein said means for releasably locking includes an over-the-center latch.

23. The dispenser of claim 22 wherein said means for releasably locking includes means for adjusting a compressive force imposed by said means for releasably locking on said pivotable door.

24. The dispenser of claim 20 wherein said door includes two hinge extension areas and an aperture therebetween which forms an outlet aperture for release of chemical by said mixing module.

5 25. The dispenser of claim 20 wherein said dispenser further comprises a male/female positioning means for precision positioning of the mixing module relative to said placement portion.

26. The dispenser of claim 20 wherein said male/female positioning means includes a projection extending out from said dispenser body and a reception cavity formed in said mixing module.

10 27. The dispenser of claim 20 wherein said door and the placement region of said dispenser body each have a recessed receiving portion for each receiving a portion of the mixing module therein.

28. A foam chemical dispenser, comprising:

a dispenser housing having a mixing module reception area;

15 a closure device supported by said dispenser housing;

said closure device being positionable relative to said dispenser housing to hold in position a mixing module received in the mixing module reception area of said dispenser; and

a latch having a first part which contacts said closure device to maintain said closure door in a mixing module hold position.

20 29. The dispenser as recited in claim 28 wherein said closure device is a door pivotably supported by said dispenser housing.

30. The dispenser as recited in claim 29 wherein said door has a pair of pivot legs pivotably attached to said dispenser housing and defining a mixing module dispensing outlet access port between said legs.

31. The dispenser as recited in claim 28 wherein said latch is a finger release latch.

5 32. The dispenser as recited in claim 28 wherein said dispenser housing has a pair of chemical passageways leading to chemical outlets at the mixing module reception area, and said closure device is designed for contact with a mixing module received in said mixing module reception area to compress seals placed in a sealing relationship relative to the chemical outlets.

10 33. The dispenser as recited in claim 28 wherein said latch is an over-the-center toggle latch.

34. The dispenser as recited in claim 28 wherein said dispenser housing includes a main body and an upper cap section supported by said main body, and said latch has a first section secured to said upper cap and a closure device contact extension positioned for contact with said closure device.

15 35. The dispenser as recited in claim 34 said contact extension is adjustable to vary compression levels induced by said closure device on a mixing module received in said mixing module reception area.

36. A dispenser, comprising:

a dispenser housing having a chemical inlet section and a chemical outlet section;

20 a closure device dimensioned for contact with a mixing module positioned to receive chemical from the chemical outlet section of said dispenser housing, and wherein said closure device is pivotable between a mixing module hold position and a mixing module access position.

37. The dispenser of claim 36 further comprising locking means for maintaining said closure device in the mixing module hold position.

38. The dispenser of claim 37 wherein said locking means includes a finger releasable device which is finger releasable from a maximum locking state.

5 39. The dispenser of claim 36 wherein said finger releasable device includes an over-the-center toggle device.

40. A method of accommodating a mixing module in a dispenser, comprising:
positioning a mixing module relative to a dispenser housing;
adjusting a closure device between a mixing module access mode and a mixing module
10 hold locking the closure device in hold mode by single finger activation of a locking means.

41. The method of claim 40 further comprising single finger activation of said locking means to facilitate mixing module release relative to said dispenser housing.

42. The method of claim 40 wherein adjusting the closure device includes pivoting the closure device while pivotably supported by the dispenser housing.

15 43. The method of claim 40 wherein locking the closure device includes activation of an over-the-center latch.

44. A method of accessing a mixing module of a dispenser, comprising:
releasing a finger release locking device locking a closure device from a mixing module
locked in position mode to a mixing module access mode.

20 45. The method of claim 44 wherein releasing the finger release locking device includes a finger flipping of a lever of an over-the-center toggle of said locking device.

46. The method of claim 44 wherein accessing the mixing module includes pivoting the closure device from a mixing module contact location to a mixing module release position.